PROBLEM-STUDY PROCEDURE IN GEOGRAPHY: AFRICA

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Many geography outlines and papers are today advocating the problem method of presenting the subject. The beginner in teaching finds little aid in her desire to carry out this advised process which appeals to her as something altogether new. The problem method has been in vogue for a long time, however, under one name or another and frequently under no name whatsoever. The teacher who puts upon the board the topics, "Position," "Surface," "Climate," "Vegetation," and the like, and follows out the work by a careful investigation of each topic in recitation, using all available means to shed light upon the subjects, is doing true problem work. The teacher, however, who day by day can infuse fresh materials and can approach each country with an unflagging spirit in spite of the monotony of such topics is inspired beyond the normal, for inspiration for most people is a flash in the pan, not a continual flame. The use of the foregoing topics has settled in some schools in one of two sloughs: either answers memorized from the text, or very generalized answers which have little or no value. Position is answered in one of four ways, as north, south, east, or west of somewhere; surface in one of three, as level, hilly, or mountainous; climate as hot, moderate or cold and wet, dry or moderate; vegetation as sparse, moderate, or luxuriant; and so on, an endless round of the same words which, because no very definite picture of the country is presented, are soon lost in a fog. The problem, therefore, will not yield good results unless it is carefully planned, and it has no advantage over any other mode of procedure in this respect. The main reason why the problem outline for class work can be urged with safety lies in the preparation of questions for class use in anticipation

rather than relying on the inspiration of the moment. Frequently the trouble with lessons may be found in the lack of suitably planned questions. The difference has been expressed for years by the phrases "hearing a recitation" and "conducting a lesson"; and teachers are accused of hearing recitations rather than teaching lessons.

The outline of problem-study procedure given here is, then, not printed because the writer believes that everybody should do problem work, but rather in the hope that some who are groping in a thicket may find a path for their journey while others traveling along a safe road may find added pleasures along the way. One series of steps in outlining a lesson plan covering a large area, either a physiographic province or a continent, follows.

First, make a list of items which it is desirable for the pupils to know.

This sounds prosaic but in many cases it is easier said than done. It is simple enough to make a list of place-names, but the elimination of place-names to the minimum requires consideration. Harder still are the statements describing the physical environment and the relationships of these to the life of the country. In fact it is doubtful whether complete statements are necessary, because in the study of detail care must be taken to furnish definite impressions to offset the disadvantages of concise generalizations which are frequently memorized. It is better to leave the pupil with an idea of his own which comes from the interpretation of the various facts than to make him letter-perfect for visitors or for an examination. This list of items for Africa might include:

I. Topography: Mainly plăteau, reaching even to the sea.
II. Rainfall: Heavy about the equator; diminishing to desert conditions north and south; at extremities beginning to increase again.
III. Temperature: Warm and humid about the equator (80°); warmer (110°) and dry about deserts; semi-tropical at north and south.
IV. Density of vegetation as a response to climate.
V. Density of vegetation and animal life as a response to these.
VI. Specifically under vegetation: Date palm of desert; rubber tree of Congo.
VII. Specifically under animals: Camel of desert; elephant of Congo and vicinity.

VIII. Density of population with reasons.

IX. Native population in two or three typical centers to bring out:

a) Simple responses in simple stages of civilization.

b) Result of isolation from world-movements.

Types suggested: Arab of desert; forest-dweller of Congo; Kafirs or Zulus of South Africa.

To this it may be well to add the list of place-names which it is desirable for the pupils to know at the end of the study. This plan, while it has some objections, results in concentration of attention by the teacher and prevents the common mistake of overloading a lesson with names. Such a list might include Egypt, Belgian Congo, Union of South Africa, Cape Colony, Transvaal, Atlas Mountains, Sahara, Abyssinian Highlands, Nile, Niger, Congo, Zambesi, Victoria Nyanza, Atlantic, Indian Ocean, Mediterranean Sea, Red Sea, Isthmus of Suez and canal, Madagascar, Cairo, Alexandria, Cape Town, Kimberley, Johannesburg. To insure a thorough knowledge of these twenty-four names would be a gain over much of the aimless teaching where a hundred or more names are imperfectly taught. Furthermore, with a complete mastery of these it is possible, because of some specific interest as in the French, German, and British colonies today, that a few more names may incidentally become a part of the pupil's stock.

Secondly, frame the statement of the problems in such a way that as many of the items in the foregoing list as possible may be concentrated around a single exercise. This will avoid scattering the attention, will aid the memory by the processes of association, and will be a good means of bringing out relationships. The following statements are suggested:

1. Why is the Nile Valley densely populated?
2. What conditions favor the Barbary States more than the rest of North Africa (excepting the Nile basin)?
3. Why do minerals surpass all other exports of South Africa?
4. The tropical lowlands yield little else than raw materials. Why?

Thirdly, each of the above statements must be elaborated, and the first, as an example, is now subdivided into paragraph headings. These should outline a consistent and logical plan of investigation the solving of which will yield an indubitable answer to the question.

1. Why is the Nile Valley densely populated?

A. Fact of problem heading shown: Is the implied statement true?

B. Why should we not have a densely populated section here? This includes a study of the climate of North Africa, the trade-wind influence, the amount of rain, and the great desert.

C. What makes the Nile more favored than other rivers of the north? Its rising under a different wind belt; its tributary supplies; its seasons, and the amount of water which can be stored.

D. The possibilities of agriculture in a desert: The soil; irrigation methods, old and new; the Assuan Dam.

E. The results: What is raised? How much?

F. The labor demanded: The problem of sustenance; the excess of production; shipping; the resulting influence of the Suez Canal.

The fourth step involves the framing of suitable questions or directions under each paragraph heading so that the pupils are led along in their study to a fairly logical conclusion. These questions should use all the available material at hand: the school text; the various maps and tabulated data of the text; the various maps and pictures; stereographs; lantern slides; and whatever forms the equipment of the room that will throw light upon the problem. A suggestive list is offered for the first paragraph only.

A. Fact of problem heading shown: Is the implied statement true?

What is the population of Egypt (tables)? From the political map, ascertain the densities for the Nile Valley; for the rest of Egypt; for Algeria. What does a density such as 125 to 500 per square mile mean? What is the density of population of Rhode Island? What town in Rhode Island has a population density comparable to that of the Nile Valley? What other area of Africa has a density equal to that of the delta? of the valley proper? Conclusions drawn?

The process outlined above has a somewhat pedantic sound and it will probably be found valueless if followed slavishly. However, like all suggestions as to method, it implies modification and inspiration on the part of the teacher in order to be suited to her peculiar temperament and to the work to which conditions restrict her. The problems if undertaken at a sitting or as a new task would be appalling with all the other work to be done, but as a preparation which ought to be a part of her work day by day it does not demand an undue share of time. If, however, no time is ever given in advance of a lesson, as seems to be so frequently the

case, the embarkation on a new method may seem to be a hazardous and unprofitable journey, especially if the old way has not been subjected to criticism. A series of lessons under any method will not be successful if they are approached without preparation, and a vast amount of time is wasted in the geography lesson by aimless and unnecessary questioning. The questions cited under the fourth step should be placed on the board for class study in lieu of topics. In the search for the conclusions the pupil must be taught to use his text and supplementary volumes. The result is that he is really studying and not committing paragraphs and answers to memory. The teacher who plans her questions carefully will without doubt be rewarded by a real gain in teaching power, while her work, which has so far escaped criticism, may now be subject to praise.